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City planning for Milwaukee

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# CITY PLANNING FOR MILWAUKEE

WHAT IT MEANS AND WHY IT MUST BE SECURED

A REPORT SUBMITTED TO

THE WISCONSIN CHAPTER of the AMERICAN INSTITUTE OF ARCHITECTS,  
THE CITY CLUB,

THE MILWAUKEE REAL ESTATE ASSOCIATION,  
WESTMINSTER LEAGUE,  
SOUTH SIDE CIVIC ASSOCIATION

By DR. WERNER HEGEMANN

MILWAUKEE  
FEBRUARY, 1916



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# CITY PLANNING FOR MILWAUKEE

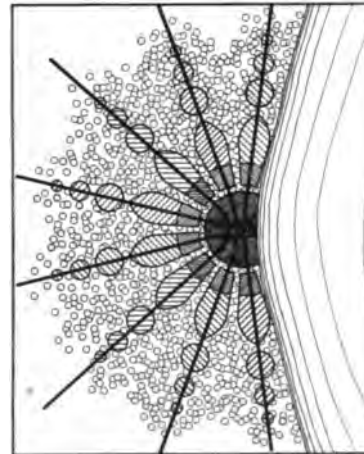
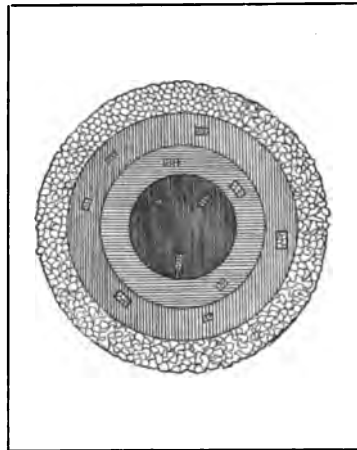
## WHAT IT MEANS AND WHY IT MUST BE SECURED.

### SCOPE OF THE REPORT.

City planning is as comprehensive a subject as medicine, law or natural science and its principles cannot, of course, be exhausted in a short paper. Nor can a more or less superficial survey of a city's present plan and its possible future requirements lead to recommendations covering all phases of city planning. All that shall be attempted here is to touch on some of such salient features as ought to be of special interest to a Milwaukee public and as may lead to a clear understanding of the term "city planning."

### THE OLD CITIES.

Before discussing local problems a very brief outline of the development of the city planning idea in the old countries, condensing the history of the movement in two pictures and two diagrams, may be of value.



### DIAGRAMS TYPIFYING:

#### THE OLD CONCENTRIC CITY

hemmed in by fortifications and lack of rapid transit, solidly built up, congested, and lacking parks and playgrounds except on the outskirts; these outer parks being represented by small circles. The concentric areas follow the lines of old fortifications. (From the third prize design of the Greater Berlin City Plan Competition, 1910, Eberstadt-Moehring-Petersen).

#### THE MODERN STARSHAPED CITY

located on the waterfront, opened up and decentralized by rapid transit; many healthful small garden suburbs are grouped around the business district. Plenty of room for gardens and parks to carry trees, air and light into the heart of the city. The heaviest black lines indicate rapid transit lines. The steam railroads and the harbor are not shown in this diagram.



#### THE CITY OF VIENNA IN THE 17th CENTURY

Typical example of the old fortified city with its growth concentrated by bulwarks into concentric rings. In the middle of the picture the lines of previous fortifications still can be recognized. The outer ring of fortifications seen in the picture since 1858 has been transformed into the famous Ringstrasse. This transformation started the modern city planning movement in Europe. A picture of the present state of the Ringstrasse is given on following page.

The cities of Europe were originally strongly fortified by surrounding walls and bulwarks and had therefore to congest their population in exceedingly small areas. Values of land were consequently high and the development thereon resulted in comparatively tall, expensive structures, generally of such beautiful and harmonious design as corresponded with the high artistic development of former centuries. Relieving somewhat this congestion a number of public squares or plazas, needed for public purposes (mainly open markets) were placed here and there. Around these plazas, public and private buildings were grouped, again in exquisite architectural harmony and with a refinement of taste that almost surpasses modern comprehension. There was, however, seldom sufficient space for public parks or private gardens inside the fortifications, but around the narrow confines of the city an endless expanse of agricultural or forest lands was always ready for the recreation of the urban dweller. Only after the social structure became more stable did houses invade this realm of nature outside the fortifications, but the fortifications themselves remained undisturbed long after the introduction of gun powder. Now, in the abandonment of these fortified areas modern city planning had its impetus. The old moats and bulwarks were in the course of time transformed into boulevards, a word that has become identical with wide streets, beautifully planted with trees and lined with fine buildings. These stately streets in the old cities, following the course of the fortifications, were, of course, circular,



#### **RINGSTRASSE, VIENNA**

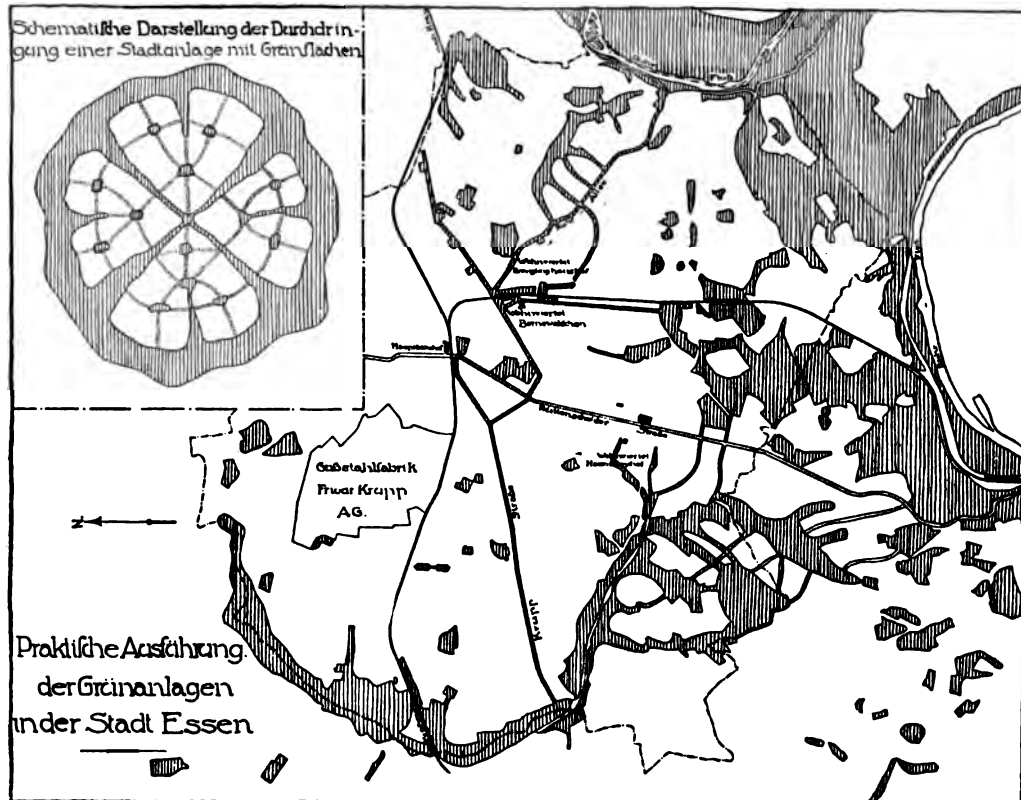
View showing City Hall in the center, building of the national legislature to the left. This street is the result of transforming judiciously the old fortifications shown on the preceding picture.

surrounding the old heart of the city. The best known examples are the boulevards of Paris and the Ringstrasse of Vienna. Only later was the importance of diagonal streets emphasized.

#### **THE OPEN STAR-SHAPED CITY OF MODERN TIMES.**

The modern city, like Milwaukee, has grown up under very different conditions. Milwaukee never required palisades against the Indians; no fortifications restricted the growth of the city to a limited, congested area. The modern city could expand unfettered from its beginnings and this expansive tendency was soon strongly accentuated by modern means of transportation, i. e., the railroads, and especially the street car lines and now the automobile. The map of any well-planned modern city clearly shows this expansive tendency exemplified in thoroughfares radiating diagonally from the business center and every new city plan should emphasize and develop the diagonal or radial ways and means of decentralization. City planning is both the organization and directing of the city's physical growth.

There are always serious obstacles in the way of a city's growth. After the disappearance of fortifications and since the introduction of modern means of



#### PARKS SURROUNDING AND PENETRATING INTO THE CITY OF ESSEN, GERMANY

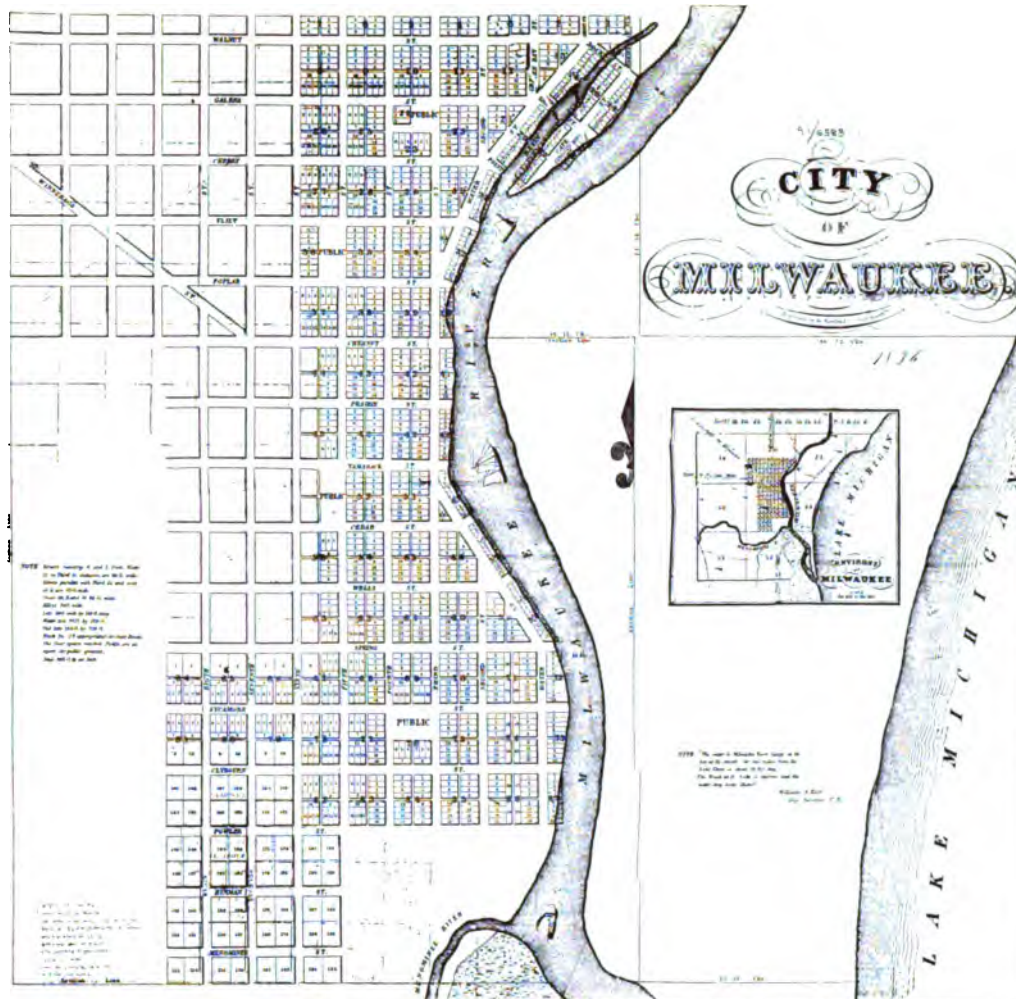
In the upper left corner a theoretical diagram showing the ideal distribution of parks aimed at in laying out the parks of Essen.  
Plan by Beigeordneter Schmidt.

transportation a great number of factors have unfortunately developed, which tend to check the expansion of modern cities and sometimes create conditions of congestion almost worse than the congestion in the fortified cities of old. To fight such harmful tendencies is one of the main objects of city planning.

#### MILWAUKEE'S FIRST CITY PLAN: 1835.

This brings us right to Milwaukee's own problems. City planning is by no means anything like a new thought, foreign to the development of this city. City planning was practiced in Milwaukee from the very beginning of the town, i. e., from the year 1835. At that time Mr. Byron Kilbourne, a surveyor from the East, came to the site which to-day is the City of Milwaukee, and made the first city plan. The principles and ideas that guided him in his planning are laid down in a somewhat condensed form in the first map ever printed of the "City of Milwaukee, engraved by W. Haviland, Cincinnati" in the year 1836. There the explanations are given: (see caption under the reproduction of the plan next page).





### THE FIRST CITY PLAN FOR MILWAUKEE, PUBLISHED 1836

"Streets running North and South from Water Street to Third Street inclusive, are 80 feet wide. Streets parallel with Third Street and West of it are 70 feet wide. Cross streets East and West 80 feet wide. Alleys 20 feet wide. Lots 50 feet wide by 150 feet long. Water lots 40 feet by 120 feet. Out lots 160 feet by 210 feet. Block No. 24, appropriated for Court House. The four spaces marked Public, are set apart for public grounds."

### THE COMPREHENSIVE CITY PLANNING PROGRAM OF 1835.

The explanation as given on this map of 1836 therefore contains a comprehensive city planning program: it designates streets of various widths as the means of land communication and transportation and specially shaped water lots as terminals of water transportation; it sets aside the public grounds as secured in the shape of four open spaces; it determines business areas, housing areas with private gardens made possible by urban lots of ample size and much larger lots on

the outskirts (outlots). The civic center idea also finds its expression in the setting aside of suitable grounds for a Court House. What Mr. Kilbourne tried to bring about in the year 1835 was exactly what city planning must achieve to-day, namely, the co-ordination and the harmonizing of all the various factors that together determine the make up of a city map; i. e., freight and passenger transportation, accommodations for business, housing and recreation and the dignified expression of the civic needs in a civic center. The only difference is that the task of the modern city planning is much more complicated and involved than it was 100 years ago.

### **PLANNING FOR SPITE.**

In contrast to this beneficent kind of farsighted city planning there exists another type of city planning, of a narrow and shortsighted character, and it seems that like many other cities, Milwaukee has had, since its very beginnings, seriously to suffer from such misdirection. It is reported that the laying out of the eastern part of the city, i. e., east of the Milwaukee River, was not done in a spirit of congenial co-operation, but rather in a spirit of spite and antagonism. The streets of the east side were laid out in a way not to parallel and not to meet the streets of the west side. The curious breaks between Wisconsin Street and Grand Avenue and other streets running east and west are one of the results charged to this extraordinary spirit of ill-will. But even more serious from the standpoint of traffic flow than these breaks, which at least bring a certain element of picturesqueness into the monotony of the modern city is the fact that Broadway, the only wide street (100 feet) of the city, instead of forming an important and useful link between east and west, lies almost unused by traffic because it's direction is north and south, connecting no important points. The Green Bay and Port Washington roads enter the city at Third Street and not near Broadway.

It is furthermore told that the spirit of shortsighted antagonism between the west and east sides not only found its expression on the city plan, but even devised other practical policies to express itself, among which were the prohibition against west side steamers to land on the east side, the use of small cannon in the long so-called "bridge war" and the different ways of spelling the name of the city. These manifestations of sectional strife were not much different in spirit from what happened only recently during the fight over the location of the Court House and the discussions affecting the Civic Center plans referred to in later paragraphs.

### **THE 1835 PROGRAM FOR PLANNING MILWAUKEE OUGHT TO BE MODERNIZED AT LAST.**

But there are many other factors besides sectional antagonism that hamper a modern city's growth, and some of these factors must be mentioned here. There is primarily the thoughtless routine in which the continuous extension of the city follows an old program laid down long before the advent of modern conditions. Taking the case of Milwaukee, the program regarding width of streets, open spaces, etc., etc., as determined upon in the year 1835, was probably quite appro-

priate for the then existing conditions and the state of city planning science of that time. But conditions have changed considerably. Modern city planning has adapted itself to the new conditions, but Milwaukee—like hundreds of other cities—simply adhered to the old ideas and the old routine established in 1835 according to the slogan “what was good for grandfather is good enough for me.”

### **GREATER WIDTH FOR STREETS OF MAIN TRAVEL.**

But this is hardly logical. The width of Grand Avenue, and that of all the other thoroughfares of main travel, which were but 80 feet, were sufficient for the traffic of a little trading post 70 years ago, but they are not wide enough to carry modern traffic, including automobiles and two street car tracks. About 60,000 people ride every day on Grand Avenue in street cars alone, and their number must increase rapidly. The experience of the city builders all over the world teaches that old streets of main travel must be widened when the opportunity arises, but a city without a definite city planning program naturally permits such opportunities for widening to go by. Milwaukee, for instance, permits just now the erection of the new Plankinton Arcade Building right to the old lot line instead of forcing the building back 10 or 20 feet as it has been done along entire streets in many European and American cities. Philadelphia thus widened Chestnut Street and gained what Milwaukee would gain in widening Grand Avenue. This blind acceptance of old street widths, irrespective of the various new uses to which streets are to be put, is especially unwarranted in the outlying parts of the city where houses are just beginning to be built and where the widening of main lines of travel would be comparatively cheap.

### **THE ROUTINE OF THE CHECKERBOARD.**

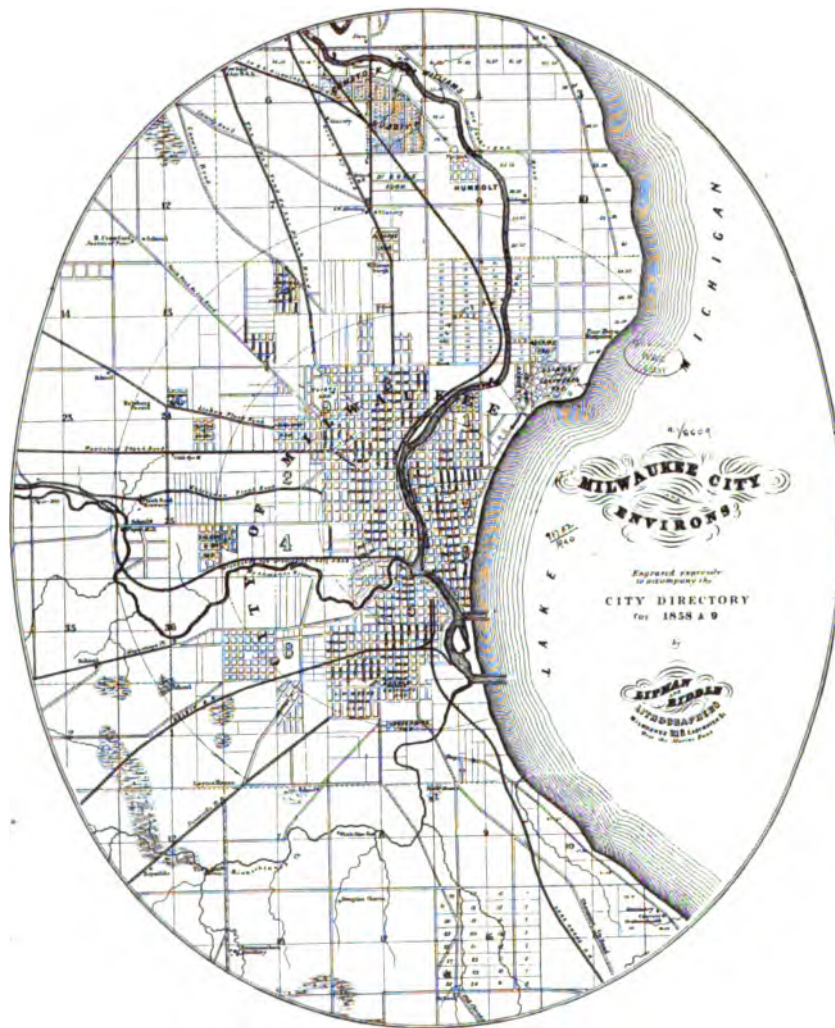
Difficult as the efficient handling of traffic is made by these antiquated street widths, the traffic problem is further complicated by the direction in which the streets are laid out. In 1835 subdivision of a small area in a checkerboard fashion resulted in no harm. As a glance at the old maps shows (see map of 1845) this small checkerboard section was served by a splendid system of diagonal streets radiating in all directions out into the open country, making the city the center of large neighborhoods, practically the Hub of the Universe. When later on these diagonal highways were permitted to be wiped from the map by the thoughtless extension of the checkerboard streets, it simply shows that routine and not foresight was ruling the growth of the city. This routine kind of platting is exceedingly bad city planning. The building of streets against the natural flow of traffic instead of with the traffic, largely succeeds in stopping traffic. It prevents the healthy spreading of land values. It congests the people inside a limited area. Real estate experts of Milwaukee assure us that important outlying north and south avenues act as barriers against the western movement of realty values. Such important thoroughfares, for instance, as Layton Boulevard and Eleventh Avenue, not following the natural flow of traffic formed for some time a western



boundary for home seekers. They could not have done so if the layout and direction of these avenues, instead of practically damming the traffic, had followed the line of least resistance diagonally away from the heart of the city, like, for instance, National Avenue, Fond du Lac or Forest Home Avenues, in other parts of the city.

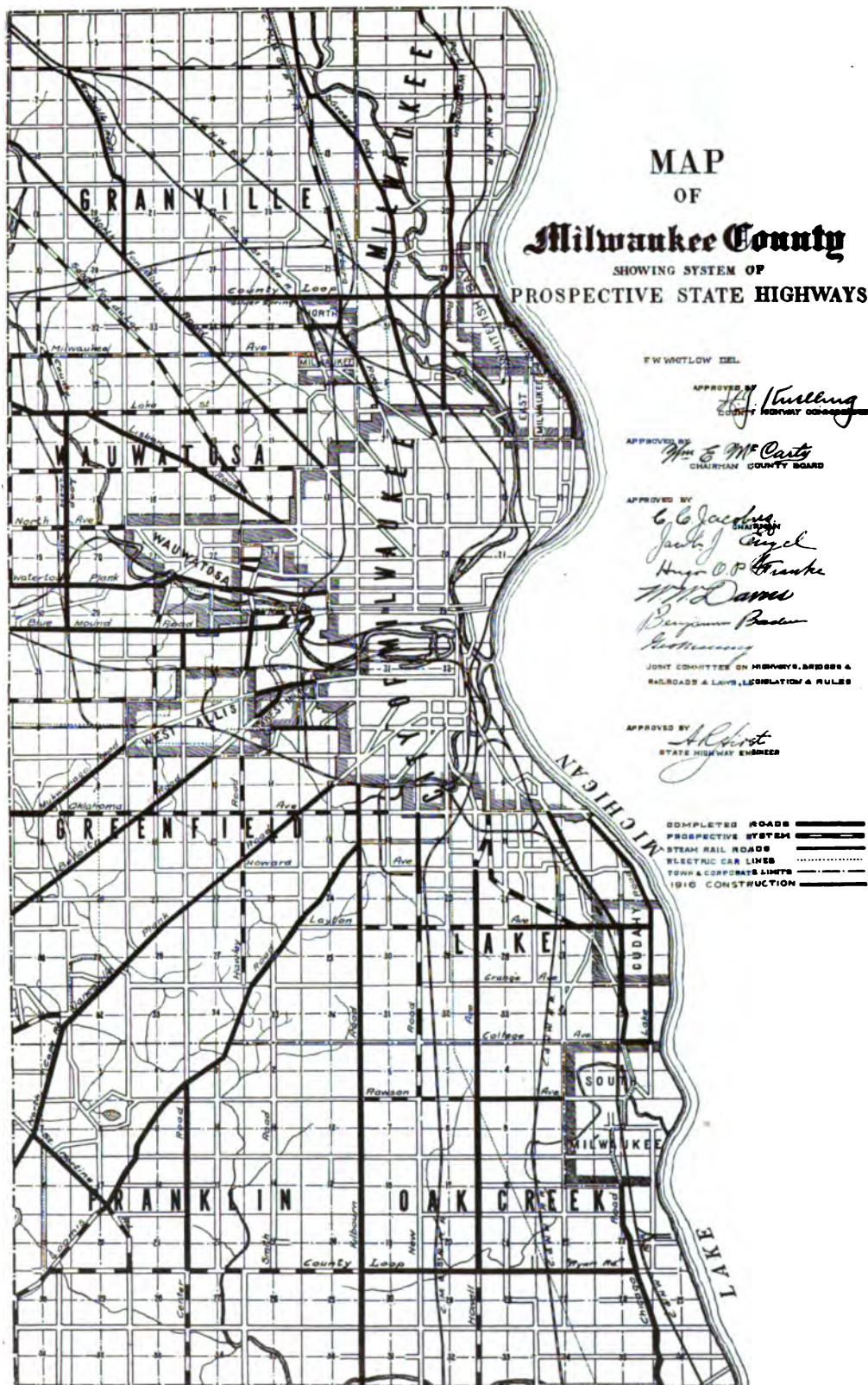
### THE COUNTY HIGHWAYS, A FINE DIAGONAL STREET SYSTEM IN DANGER.

Very fortunately for Milwaukee a great number of these old highways are still preserved outside the city limits and are likely to be preserved for ever, under



MAP OF GREATER MILWAUKEE IN 1858

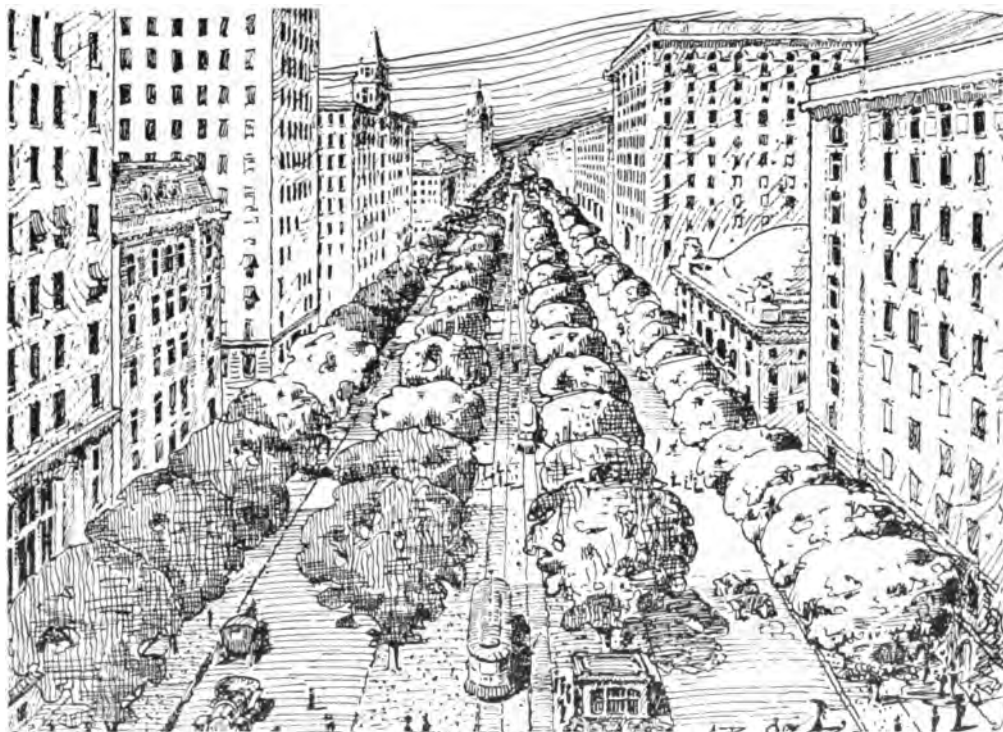
Showing the fine system of radial highways grown up naturally, but obliterated wherever touched by the progress of building along checkerboard lines.





the care given them by the County Highway Commission. Quite a number of Milwaukee's citizens don't seem to realize by what a splendid system of diagonal county roads this city is served, nor on the other hand, how the efficiency of this system is seriously impaired and its value actually endangered. While most people seem to be satisfied with the fact that there has been made on these Milwaukee County Highways one of the most successful efforts in the world to lay a new type of pavement suitable for automobile traffic, few realize that: First—almost none of these county roads has an altogether satisfactory approach to the heart of the city; Second—the right of way of every single one is far too narrow; that of the Chicago Road being 80 feet and that of the others but 66 feet. The pavements, 18 feet wide may be sufficient for the present, but the rights of way are too narrow to assure the future efficiency of these streets. Such narrow roads cannot accommodate modern suburban traffic in that form, which is most important for a city of this size, i. e., efficient street car lines; and Third: none of the county roads, with the exception of one, carries street car lines.

Commendable and splendid as the achievements in paving on these highways are, their importance from the city planner's point of view seems small as compared with the urgent necessity of securing for diagonal or radiating roads, rights of way



**DESIGN FOR PARKED WAYS PUBLISHED BY THE METROPOLITAN PARK COMMISSION OF MILWAUKEE IN 1909**

Showing how business streets can be attractively parked into boulevards and how boulevards can very well carry rapid transit if wide enough and if properly subdivided. The Metropolitan Commission wisely urged a comprehensive system of such roads 130-150 ft. wide. Compare pictures on pages 13 and 33.



**UNPLEASANT EXAMPLE OF STREET WITHOUT TREES**  
As found in Milwaukee and other cities. Compare picture on page 33.

of from 120 to 150 feet before the land is built upon and before widening becomes prohibitively expensive or otherwise impossible. The widening of these rights of ways and their convenient connection with the heart of the city are among the most imperative problems of a new city plan to be worked out, if Milwaukee ever hopes to be a large metropolis.

### **CITY AND COUNTY EQUALLY INTERESTED IN REORGANIZATION OF COUNTY HIGHWAYS.**

How closely in this highway development the interests of the city at large, and especially that of the real estate owners and homeseekers are connected with the interests of the outlying country may be illustrated by one example. Up to a short time ago the farmers south-west of Milwaukee sent their produce by rail to Chicago and from there it was shipped by boat to Milwaukee. The main street car system of this city for various reasons, partly legal, is behind modern development in not giving adequate freight service on its lines. Only a few months ago an electric package freight service to East Troy and Burlington has been installed upon the instigation of the Merchants and Manufacturers Association, and to-day butter, eggs, poultry, and a large amount of fresh milk pours directly into the City of Milwaukee, which to that extent ceases to be a tributary of Chicago and becomes its own metropolis. The possibility of availing himself of such regular electric package freight service means more to the country and city dweller than even the opportunity of riding in a motor car over the paved county-highway.

### **NECESSITY OF RAPID TRANSIT DEVELOPMENT.**

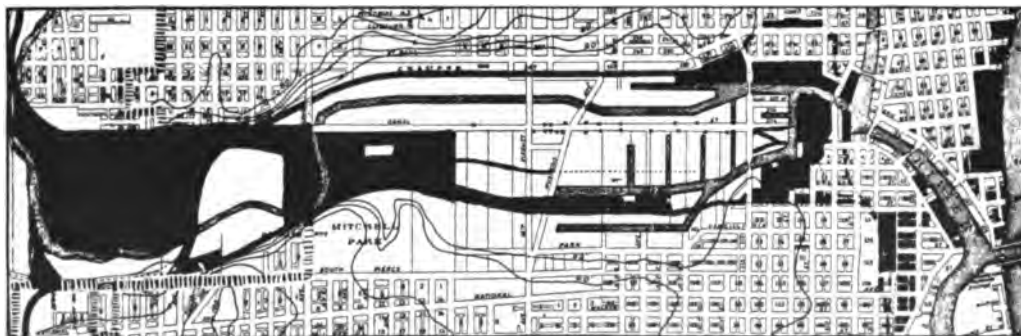
Everything that can be done to develop the radius of rapid transit of a large city like Milwaukee is essential. One may leave aside for a moment the issues of the fight about the street car fares, and just consider the fact, mentioned before, that the plan of the City and County of Milwaukee neither contains nor contem-

plates at present any street really suitable to carry highly developed modern street car traffic, and the other fact that since the end of 1911 no extensions of the street car system of Milwaukee have been built. There evidently is a lack of co-operation between public and private enterprises which surely must prove detrimental to the progress of this city.

It has become almost axiomatic that a city approaching in population the half million mark ought to develop higher types of rapid transit than ordinary street car traffic on street levels. Or stated otherwise, in order not to stop its own development a city of this size ought to think of high speed suburban lines running on an elevated level inside the congested part of the city and making about 18 miles an hour instead of 9 miles as the Milwaukee street cars do. Milwaukee at present has no street wide enough to accommodate an elevated service advantageously in the future. Even the present ordinary street car service of Milwaukee runs much slower than would be necessary if a thorough system of skip-stops was introduced. Against Milwaukee's nine miles speed the Cleveland lines make eleven. In Oakland, California, during the rush hours between 6:09 and 7:45 in the morning, and between 4:57 and 5:57 in the evening the street car company runs ordinary street cars as a special express service from the center of the city to one of the suburbs without intermediary stops by switching the local cars off (at the intersections with cross-town lines) until the express cars have passed; the distance of 14.80 miles is run in 72 minutes. Expedients like this ought to be introduced in great number in Milwaukee if the healthful expansion of the city is not to be seriously interfered with by the absence of higher types of rapid transit. The co-operation of the steam railroads for suburban service would be especially desirable. The necessity of extending the areas available for homeseekers will be dealt with further in connection with the discussion of housing.

### **RAILROADS AND THEIR YARDS DETERMINING THE CITY'S MAP.**

In the city of olden times the street system formed the backbone of the city



### **AREAS IN THE HEART OF MILWAUKEE CONTROLLED BY THE RAILROADS**

From data furnished by the State Railroad Commission. Courtesy of Milwaukee Leader.

map; the importance of the street layout in the modern city as affording opportunity for electric street car service has been dwelt upon. Quite as important and more difficult to accommodate are the needs of steam railroads and the water terminals. Especially is the proper location of the huge service yards considerably more difficult to determine than the location of streets. The amount of capital invested and to be invested in the freight and passenger facilities of a large city is enormous, and the degree of efficiency of these systems in relation to the local industries depends on their being located in the right—the most strategic and most economic—positions. A city almost always experiences difficulties, if it permits its development in other directions (parks, streets, residences) to collide with those areas and rights of way that ought to be rightly reserved for the needs of transportation in accordance with a well studied and farsighted plan.

In order to show the necessity of such a plan the railroad problem shall be touched here from two angles, i. e., the elimination of grade crossings and the problem of industrial areas, the latter being closely connected with the harbor problem.

### THE GRADE CROSSING PROBLEM.

According to the prevailing practice, a grade crossing is ordered to be eliminated by the State Railroad Commission, when danger to pedestrians and vehicles is there recognized. A few years ago, for instance, the crossing of the Chicago, Milwaukee & St. Paul R. R. over Fond du Lac Avenue was eliminated by depressing the street in a rather unsightly manner under the railroad tracks. To-day the necessity of eliminating other grade crossings of the same railroad in the immediate neighborhood is recognized by the Railroad Commission, involving a new expenditure of at least half a million dollars to the city, not to mention the expenses accruing to the railroad. Now it appears that great expense and much difficulty could have been avoided if the first elimination (at Fond du Lac Avenue) required a few years ago had been studied in connection with the new work found necessary at present. Instead of depressing the street the railroad should have been raised. Unfortunate waste of this kind cannot be avoided if no plan anticipating coming needs of street and railroad traffic is worked out and perfected continually. Not only every individual railroad track and its crossings has to be subjected to such a study of coming development, but it is the metropolitan rail system in its entirety that must be considered. Even small changes of grade in any single locality may seriously affect the entire railroad track situation, not only of the immediate neighborhood, but of localities many miles distant, and may, merely by lack of forethought, kill there the possibilities of otherwise promising development. Quite aside of these latent damages, the expense of shortsightedness in connection with grade crossing elimination in a growing city is great, as may be gathered from the fact that, for instance in Cleveland, the total sum to be expended by the city and the railroads in connection with grade elimination is figured, by competent authority, to amount to over \$24,000,000. The engineer in charge of grade elimination of one of the leading railroads in Cleveland emphasized the point that this enormous

expense could have been avoided if the growth of the city had been properly planned for; he said: "We are planning to remedy an evil, but not to remove the cause. The cost of this work is fabulous. We must think well and plan wisely that the wealth entrusted to our care be not frittered away in costly mistakes or careless management."

## **THE PROBLEM OF HIGHLY DEVELOPED INDUSTRIAL AREAS, "BELT LINE SERVICE."**

The comprehensive study of the grade crossing situation will have to take special consideration of the railroad service to be given to the future harbor and the industrial areas connected therewith. This service, that may assume the shape of a municipal belt-line, as recommended to your city council by Engineer Isham Randolph seven years ago, must also guarantee easy entrance for such new trunk lines, as this city may be able to attract, as well as for those three trunk lines which at present enter the city over the trackage of the two track-owning companies. This new belt-line might also be used to advantage for shipping through freight of the Chicago, Milwaukee & St. Paul R. R. around the city instead of congesting centrally located territory.

The problem of designating industrial areas capable of the most efficient modern organization is closely connected with the problem of the proper location of the great railroad yards. The railroads, having built the modern cities, naturally had a tendency to consider these cities as their own domain and to monopolize large central properties in the cities for their own purposes. Many of the large cities in the world are most seriously affected by congestion created in the central area by terminal railroad yards. The prevailing systems of railroad taxation in many instances made it easy for the railroads to use land centrally located for yard purposes, even long after the development of the neighborhood warranted a much more intensive use of the land. Only gradually a more modern conception of city and railroad-planning forced the railroads to abandon large parts of such central areas. Only those parts of the centrally located railroad yards, that are absolutely necessary for the serving of such central areas, are to be preserved, while the huge expanse of land used for receiving, classification, storage, etc., yards can be found, more advantageously to all concerned, in the outlying districts between or beyond the suburbs. The latter course has been followed in Milwaukee by the Chicago and Northwestern R. R. in locating its large new yards in Butler, where up to 125,000 cars are handled per month, thus saving from further congestion the inner parts of the city. The other of the two Milwaukee trunk-lines, the Chicago, Milwaukee & St. Paul R. R. still operates very extensive terminal yards in a centrally located area. These yards are located in the valley of the Menomonee River, where they are available for shipping, i. e., in close proximity to its mouth. Very probably the time has arrived when this land should be used more intensively in connection with an industrial harbor. This land would be specially useful for factory sites to be served by both rail and water approach, and to be connected by belt line service with all other parts of the industrial and commercial harbor.



## THE COMMERCIAL AND THE INDUSTRIAL HARBOR.

The problem of designating industrial areas capable of the most efficient modern organization is closely connected with the development of the water terminals.

The movement for better planning for the physical features of the city, as it was started about 1890 in Milwaukee, began, like in most American cities, with a strong movement for the creation of more parks. Originally almost the entire lake front was claimed for parks, and grants for the building of such parks were secured, part of which grants were forfeited for lack of action by the city. The idea of building an outer harbor came later and the promoters of this project had to be satisfied with that part of the water front that was left. Any modern study of the problem of how to provide Milwaukee with the most efficient harbor possible under local conditions never could take into consideration the entire water front available, but had to fit in as best it could into the space left by the park planners. It may be that the result thus secured is entirely satisfactory; it may be otherwise. Engineer Isham Randolph in the year 1909 was not asked to design the best harbor possible on Milwaukee Bay, but was asked to design a harbor for Jones' Island. Mr. Randolph's plans have since been revised and improved upon, but the harbor that will be secured, even according to the new plans, will be only a commercial harbor and will not create large sites for industrial purposes. One of the authorities responsible for the new plans, when asked about the desirability of an industrial harbor, emphasized this desirability to be great, but declared that there was no space available for creating such an industrial harbor in Milwaukee. The fact that many industrial establishments, some of which at least would be benefitted by water approach, are located away from the water, seems to prove that there is indeed no space on the water front available at inviting prices. A large number of grain elevators have been erected between Milwaukee and West Milwaukee and are thus deprived of the privileges connected with Milwaukee's location on one of the greatest waterways of the world. The last report of the Milwaukee Harbor Commission says:

"The steady increase in receipts of all kinds of grain at Milwaukee, together with the marked revival of grain shipments by lake, has aroused serious concern on the part of many business men as to the ability of existing elevators to continue to handle the grain business expeditiously in the course of the next year or two. The fact is, every grain elevator and warehouse in the city is at present taxed to its utmost at certain periods of the year, and if there should be only a normal increase in trade the time will soon be at hand when the elevator capacity of the city will be insufficient to accommodate the grain which finds its way to this point in increasing volume yearly. Such a situation, if allowed to develop, would prove detrimental to the commercial growth of the city. Milwaukee needs another 1,000,000 bushel elevator at the present time."

The report also states:

"Since 1880 shipments of grain from upper lake ports by way of the great lakes and Erie Canal have declined 85%."

The great impetus given to water transportation in the United States ought

to reconquer for Milwaukee the prominence as a grain market which it enjoyed in the early days.

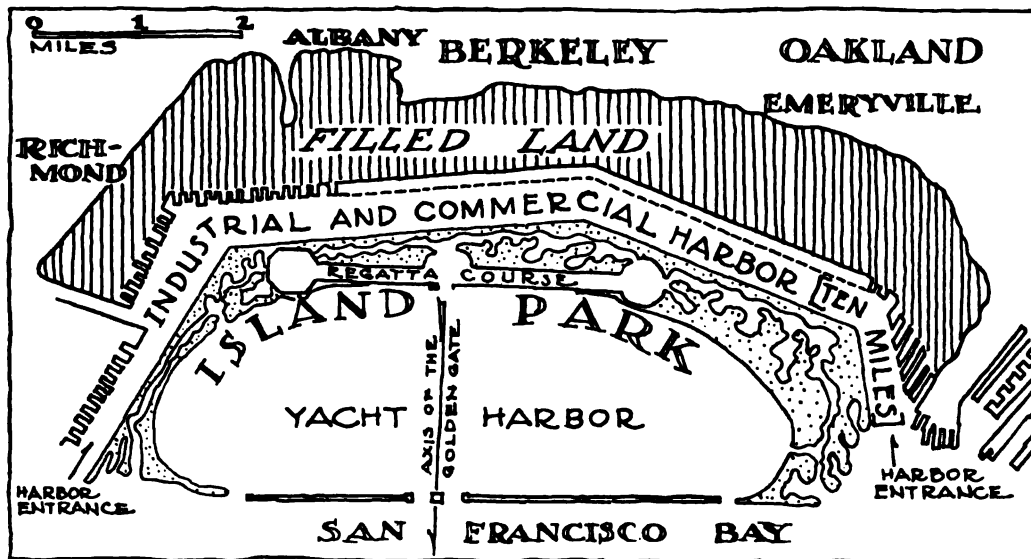
What is true about grain is true in every other line of commercial and especially industrial activity. Only by securing the most modern equipment for handling Milwaukee's industries can she successfully compete in the markets of the United States and of the world. Extensive cheap factory sites well served by rail and water approach are a necessary part of such modern equipment.

The creation of highly developed factory districts attracting industries has also proved to be the most efficient protection for the residential districts against the inroads made by factories locating in unexpected and undesirable places and seriously affecting the character and values of wide residential neighborhoods. The new automobile factory, close by Milwaukee's most expensive residential district is one of the most curious examples of planless investment on the part of the home owners as well as on the part of the factory builders. A similar example is given in the next paragraph on the park system and many others could be quoted.

### THE PARK SYSTEM.

The conflict between the park planners and the harbor planners that existed for some time in Milwaukee and the present solution of which may in the long run perhaps prove to be detrimental to the future industrial development of the community could have been avoided by comprehensively planning for both parks and harbor. There is plenty of land available in and around Milwaukee to satisfy all legitimate desires in both directions. The high bluffs along the water front will never be desirable for industrial sites and furnish ideal park sites. How much of the land to be filled in, in front of these bluffs, would be desirable for harbor purposes only special investigation could show. Even men who take a special interest in Milwaukee's park development express their readiness to sacrifice, if need should arise, those parts of the newly filled-in park lands that may prove essential for the development of the harbor. Such sacrifices may come too late if the building of the new harbor, for instance, on Jones' Island, is not planned in such a way to take into consideration later possible extensions along the lake front. There are two cities in the United States, the situation of which, regarding harbor plans, is somewhat similar to the Milwaukee situation. These cities are Chicago, on the one hand and the East Bay Cities, Oakland and Berkeley, California on the other. Colonel Thos. H. Rees, of the United States Corps of Engineers, who planned the new harbor for the East Bay Cities, approved a plan designed by the author of this report for a large outer park along the water front, for Oakland and Berkeley, but saw himself obliged to criticise the well known plans for the Lagoon Parks along Chicago's water front. In a letter explaining his design for the new East Bay harbor, Colonel Rees made the following statement approving of the outer park system:

"While not strictly within my province, a suggestion of Dr. Werner Hegemann appears to be pertinent and valuable. The outer dyke can be so shaped and treated as to make one of the most beautiful park systems in the world,



PLAN OF OUTER HARBOR FOR OAKLAND, BERKELEY, RICHMOND, CALIFORNIA, as designed by Col. T. H. Rees, U. S. Corps of Engineers, with projected Island Park in front of harbor, as approved by the designer of the harbor plan.

with driveways, walks, trees, shrubbery, flowers, boating lagoons, bathing beaches, yacht harbors, pavilions, refectories, etc., extending from Goat Island to Brooks' Island and reached by ferries or tunnel.

There has been planned for the City of Chicago by Burnham and Company a system of such islands and lagoons extending for 20 miles along the water front, for park purposes only without any reference to the creation of a harbor. For the East Bay Cities, the basis for such a park system is provided for as an incident to harbor development."

The situation of Milwaukee regarding park and harbor development is not the same as in Chicago or Oakland, but a comprehensive study of the situation should lead to a solution satisfactory to both park and harbor interests.

Milwaukee is at present suffering from a need of parks. The city owns about nine hundred acres, to which three hundred acres comprised in the County park system may be added, forming a total of twelve hundred acres. If the metropolitan park district of greater Boston, housing a population of about a million and a half and providing them with about sixteen thousand acres of parks be taken as a standard of measurement, then the City and County of Milwaukee ought to control something like five or six thousand acres of parks amply provided with golf links, foot ball and base ball grounds, bridle paths, tennis courts, children's play grounds, etc. And if the young Middle West should feel like claiming standards higher than those of the old cities of the East, more will be required. In Milwaukee the park movement is the most prominent feature of comprehensive city planning, which, together with the Civic Center idea, has so far been most strongly emphasized and therefore need not to be gone into more in detail in this short report. In addition to the fine, though not extensive parks of the city, the work

done in the County, on a still smaller scale it is true, is especially commendable. In the County lies the opportunity to acquire at low prices extensive reservations and preserve them in a wild wood character. Here some reserves of from one thousand or two thousand acres should be secured. The beautiful bluffs on the water front far out in the county are probably secure for many decades against industrial interferences; at least if well organized and attractive industrial districts are made possible in connection with the harbor. This at present does not seem to be the case, judging from the fact that factories, like the Milwaukee Vinegar Company, locate on the lake front, high over the water, thus not getting nor apparently wanting water approach, and about a mile away from the main railroad line. This land could be used to better advantage as parks surrounded by residences.

Park locations of a kind similar to the lake front present themselves along the rivers, especially on the upper Milwaukee River, and must be secured before planless or misdirected investments destroy their beauty.

In connection with the large parks a system of fine drives ought to be developed. Some fine boulevards already exist. Grand Avenue and the heart of city, for instance, could be connected with Washington Park by a chain of boulevards if the missing link between Grand Avenue and Highland Boulevard could be supplied.

Independent of the larger parks or in connection with them, smaller neighborhood parks in walking distance of every home must be secured, and they ought to be well provided with playgrounds, public baths, assembly rooms, library, etc., so as to form real social centers of their district.

### MILWAUKEE'S HOUSING PROBLEMS.

One of the most essential requirements of the industrial districts referred to in previous paragraphs is their proximity to areas well developed for the housing of the working men. Milwaukee is one of the many cities in America that claim prominence as cities of homes. On the other hand, frequent complaints are heard in Milwaukee that this city is one of the most congested of its size. The fact is that Milwaukee has in various locations slum conditions than which few can be found to be worse, even in the larger cities. Very bad conditions, for instance, can be found in what is called Nigger Alley close to Third and Wells Street; also in Owens Court immediately adjoining the tracks of the Chicago & Northwestern Depot, where about two hundred families are huddled together in a miserable cluster of half dilapidated buildings, on Van Buren Street, between Huron and Detroit, and in the alley between Milwaukee and Jefferson, Huron and Michigan Streets. Examples like the ones mentioned deserve to be visited by every citizen proud of his city. "The submerged tenth" is quite as miserable here as in New York. It is especially the interior of these buildings, their unsanitary conditions and the prevailing state of crowding that make them equal to the worst slums of much larger cities. In a number of instances tenements are built under the present street level. These, however, are not considered to be basement dwellings in spite of the ten steps leading down to them. The problem of basement dwellings is another serious subject and is more fully discussed in a report of the Commis-



**TYPICAL EXAMPLE FOR HAPHAZARD GROWTH IN MILWAUKEE—  
WEST ALLIS**

This view contains many elements of comprehensive city growth; a factory in the background, houses of the factory employees in the middle, a tower of a church to the right. In the foreground some unbuilt-upon area can be used as a playground by children, but will disappear when the need for it increases. A city plan is necessary to bring these various elements of city growth into proper relation.

sioner of Labor Statistics of 1911/12, where also a great number of photographs is given showing scandalous conditions. This report was preceded by an investigation in 1906, which, showing very bad tenement house conditions, led towards the enactment of a tenement house law in 1907. This law was declared unconstitutional by the Supreme Court and in 1909 a new law was passed. The report of the Commissioner of Labor Statistics of 1911/12, however, complained that "the tenement house law of Wisconsin is not enforced in Milwaukee," "and conditions continued to grow worse." This long period of lawlessness in building and conducting tenement houses, of course, must have produced bad conditions and habits which it will be hard to wipe out. These bad conditions prevail not only in those structures, which according to the law, fall under the definition of tenement house and therefore stand under the immediate control of the Department of Health, but conditions as bad or worse are found in many two family houses with extremely bad sanitary arrangements, often in a state of dilapidation dangerous to life and health. They are also too frequently overcrowded with children and boarders. The active Department of Health has recently started a house to house survey to discover the conditions as existing in some of the most congested neighborhoods. The results of the survey are not published yet.

**HOW CITY PLANNING CAN PREVENT HOUSING  
PROBLEMS.**

However important the enforcement of the tenement house law and the cleaning up of these slum areas may be, the real cure of the evil can be found only in prevention, i. e., providing better homes at very reasonable prices. This must be done



**LOT-CROWDING INVITED BY THE TOO NARROW AND TOO DEEP  
LOTS OF MILWAUKEE.**

These deep flats receive very little light from the sides. The eleven windows shown on the left side are going to be blanketed.

in the cheaper out-lying areas, easily reached by good and cheap suburban transportation facilities and by the proper subdivision of the land. Herein lies one of the greatest responsibilities connected with city building. The selection of the right type of lot of proper width and depth, the right type of street in regard to width, to pavement, and to planting, and the right type of house to be built along these streets is essential, and without proper study and selection undesirable and even slum conditions will come sooner or later. As pointed out in a previous paragraph, the lots in the original city plan for Milwaukee were laid out fifty feet wide by 150 feet deep. These lots of 1835 are not suitable for the requirements of a modern industrial worker under the economic pressure of a modern industrial city. To bring these lots at all within the price possible to the wage-earner they had to be subdivided, and the most awkward shape of 25 by 150 feet resulted. No proper use can be made of a lot of these dimensions. It therefore had to be used improperly, and, instead of one house, two or three were built on these lots one behind the other, creating what is called "lot crowding." In other cases long, deep flats were built running far back on the lot. In a few examples a more reasonable procedure was adopted and the entire block was subdivided by additional streets, as for instance, Maiden Lane, between Seventh and Eighth, from Lee to Center Streets. In this latter case a subsidiary street of about 30 feet width is built giving a roadway of about 20 feet and two sidewalks of about





**BACK OF CHEAPEST TYPE OF WORKINGMEN'S HOUSES IN ESSEN—  
MARGARETENHOEHE, GERMANY**

Showing to the left the gardens and rear entrances to three homes of the smallest type built in a row. Through the open doors one can see the windows on the front side of the airy houses. The space saved between the houses is added to the garden. Compare the unsatisfactory arrangement shown on page 22.

5 feet each. Lots are about 75 feet deep and 40 feet wide and are improved with houses costing from about \$2,400 to \$3,000 and containing four rooms and bath and sometimes a kitchen in the basement. Better conditions like this, providing streets and lots adapted to the needs of the case, should not be left to accidental intelligence, but should be secured when the planning for the subdivision of the neighborhood is done. The great problem in connection with housing arises in the procuring of the very cheapest type of dwellings. There are now thousands of families, and there will be very many more, whose work the community needs, but for which it pays in a manner not permitting these families to allow more than ten dollars a month for their shelter. The question immediately arises, what can these families get for ten dollars a month? It is a widely current but mistaken notion that families of this type can select the type of dwelling they want. On the contrary, these families, often coming in as quickly as the growth of industries demands, simply have to take what they can get, and what they can get is largely, if not wholly, determined by the prevailing methods of buildings and developing the city. There are two alternatives; the one leads to overcrowding in unhealthy tenements; the ideal, in the other direction, is healthy homes, ample room, privacy,

light, air, home-gardens and public parks and playgrounds within walking distance, or at least made accessible by rapid transportation at low cost.

It is a matter of comparatively simple calculation to find out how much a lot for a small home in Milwaukee should cost, if a family paying but \$10 a month for rent shall be able to occupy it without taking in boarders or crowding additional houses in the rear. Much active and commendable enterprise is to be found in Milwaukee in subdividing lots and building and marketing homes of a cheap type. One concern alone has covered 70 acres with about 400 homes, costing from \$1,800 to \$4,000 each. But even this cheap type of a home is beyond the reach of the family that can afford no more than \$10 net per month. It is, therefore, necessary to bring about considerable reduction in cost, not only in the type of structure, but also in the size and type of the lot and the type of the street serving the lots. One great saving could be made if this type of real estate enterprise could by virtue of suburban transportation enter the field at a time when the land has still an agricultural value. There are wide areas of very desirable land in the immediate neighborhood of Milwaukee, selling between \$300 and \$400 an acre. But this is not the price at which the subdivider now acquires this land. Before the subdivider starts his work, the land acquires a speculative value in an intermediary state of affairs, the only practical outcome of which is to raise the price from \$1,000 to \$2,000 or more an acre. This means an increase over the agricultural value from 200 to 600%, which acts as a direct tax on the working man, or rather on industry. Under the conditions of the American labor market, the working man can largely shift this taxation of his shelter upon the manufacturer, and to that extent it means less efficiency in home industries; a very serious matter, a very real and direct handicap in the development and the prosperity of Greater Milwaukee.

Another saving can be made in selecting more appropriate types of lots. The congested cities of Europe, with their high land values, found it necessary in order to provide for homes of the most modest kind for the working man, to abandon the idea of the home surrounded by a garden and adopt the plan of homes built in rows with a little garden in front and a larger garden in the rear. The same procedure has been adopted in the "cities of homes" in Eastern America, like Philadelphia and Baltimore. It almost seems as if the middle west, in spite of the more favorable natural and historic conditions, will have to resort to the same expedient. The cheapest kind of a lot sold at present in Milwaukee seldom costs less than \$300. This lot is unimproved, has no water, no sewer, and the street in front of it is neither paved nor planted. In some cases, even the future street level is not yet established, and its later establishment brings unpleasant surprises and much expense to the lot owner. Under these conditions a really improved lot within walking distance of a factory costs about \$600 or more. This is far more than a man paying \$10 rent per month can afford. Furthermore, this \$600 lot is considerably larger than is needed. 30x120 ft. is almost twice the size of what is absolutely indispensable. The type of house generally erected on these lots leaves about 8 ft. open space between the houses. These 8 ft. spaces are little better than waste, being insufficient to give much light to the windows opening on it. They are insufficient for gardening, and form mainly an undesirable gap in which the snow

and ice, accumulating during the long winter months, cannot melt away. If the houses were pulled together into rows, adapting the plan of the house to this type of building, a saving in the width of the lot could be made to advantage. Other savings, as stated before, can be made in the depth of the lots and in the width and pavement of the street.

Another important feature in building residential districts for working men lies in the proper grouping of the houses in relation not only to the factories but also around some central feature of a more social character, like neighborhood centers, club-houses, schools and churches. Besides proximity to the factories, parks between the factories and the housing districts are desirable so as to screen off the undesirable features of industry and to make the walk from and to the factory pleasant. The placing of the various public buildings of a social character just mentioned should not be done in a haphazard manner somewhere on a corner or in line with private homes. By disappearing in the monotony of the checkerboard they lose all effectiveness, but by central location their quality will be emphasized and advertised, giving strong impetus to the development of a neighborhood spirit, radiating from these subsidiary centers. By properly grouping well-designed, cheap homes around these subsidiary centers, artistic effects of highest beauty have been achieved for working men's districts, putting to shame the often inharmoniously developed residences of the wealthy.

## RESIDENTIAL DISTRICTS AND THEIR HARMONY.

The homes of the well to do afford, or ought to afford, more opportunities for the development of artistic home ideals and to produce neighborhoods of real harmony and beauty. The ideals regarding the appearance of a comfortable home have changed considerably in the last twenty years. After the decades between 1865 and 1905 had gone through one of the most deplorable breakdowns of good architectural manners, there has been a general raising of standards in good taste as applied to home architecture both in Europe and in this country. Many of the old residential districts of the well-to-do in most American cities, and also in Milwaukee, are built up with monuments of the artistic breakdown of former decades. This lack of taste, as expressed in the architecture of those homes, finds equally strong expression in a complete absence of imagination, taste or even common sense in most features regarding the city plan of these neighborhoods, as, for instance, character, width, pavement, planting and direction of streets. Nothing but the most dreary checkerboard, without any attempt towards grouping or harmonizing the residences or the numerous little churches with their variously fashioned architectural styles, is the predominant note. Often even the most primitive care of protecting the wealthiest neighborhoods against the inroads of factories or apartment houses, has not been taken. Huge apartment houses, much higher than would be permitted in any of the teeming capitals of continental Europe, are built covering the entire lot and shamelessly exposing naked party walls in expectation of the neighbor committing a similar crime and ready to have its own windows blanketed. The increasing erection of apartment houses in the better residential districts is

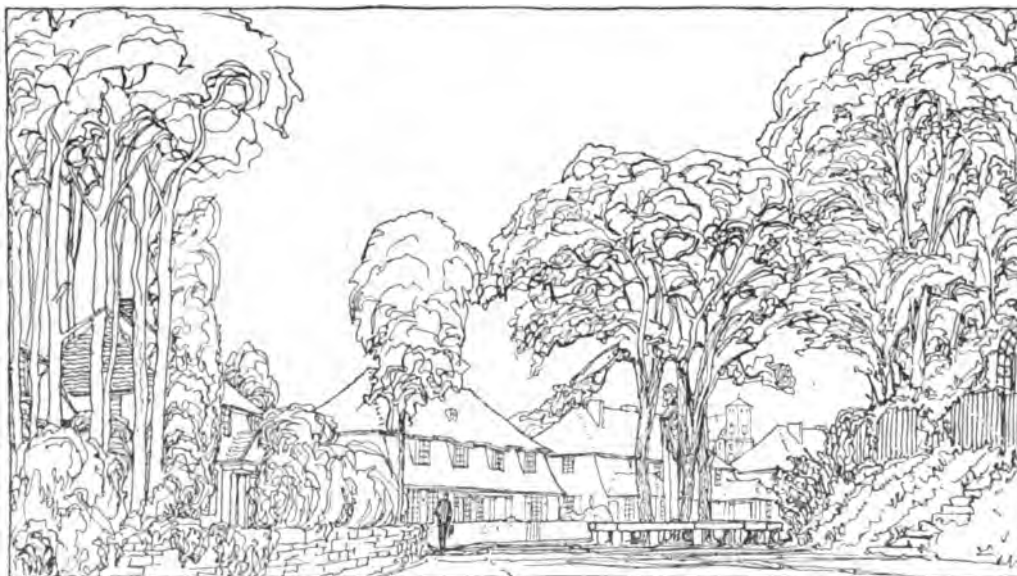


#### RESIDENTIAL ARCHITECTURE GROUPED HARMONIOUSLY

on lots too narrow to permit sufficient space between houses. The space saved by having the party walls touch each other is added to the gardens behind the houses. Compare the narrow gaps between the otherwise well designed residences at the right side of upper picture on adjoining page. (From a sketch by L. Schmieder.)

claimed to be due in part to the high taxation put on the land in these districts. Residential areas along the lake front are said to be taxed on \$400 a front foot valuation, which makes a kind of "improvement" that is more remunerative than a single home, almost imperative.

It is doubtful whether, from the point of view of the City Treasury, it is desirable to put this high taxation on residential property, considering the fact that all the people who live in the upper stories of an apartment house and help paying its taxes, do not pay taxes for homes in other districts of the city. In other words, taxation which is so high that it enforces the building of apartment houses, concentrates land values into very limited areas, very much as was the case in the old



#### RESIDENCES GROUPED HARMONIOUSLY

The lots are wide enough to permit sufficient space between houses. Compare the harmony of the architectural lines with the mixture of styles preferred by the owners of the buildings in the next picture. (From a sketch by F. Lahrs.)



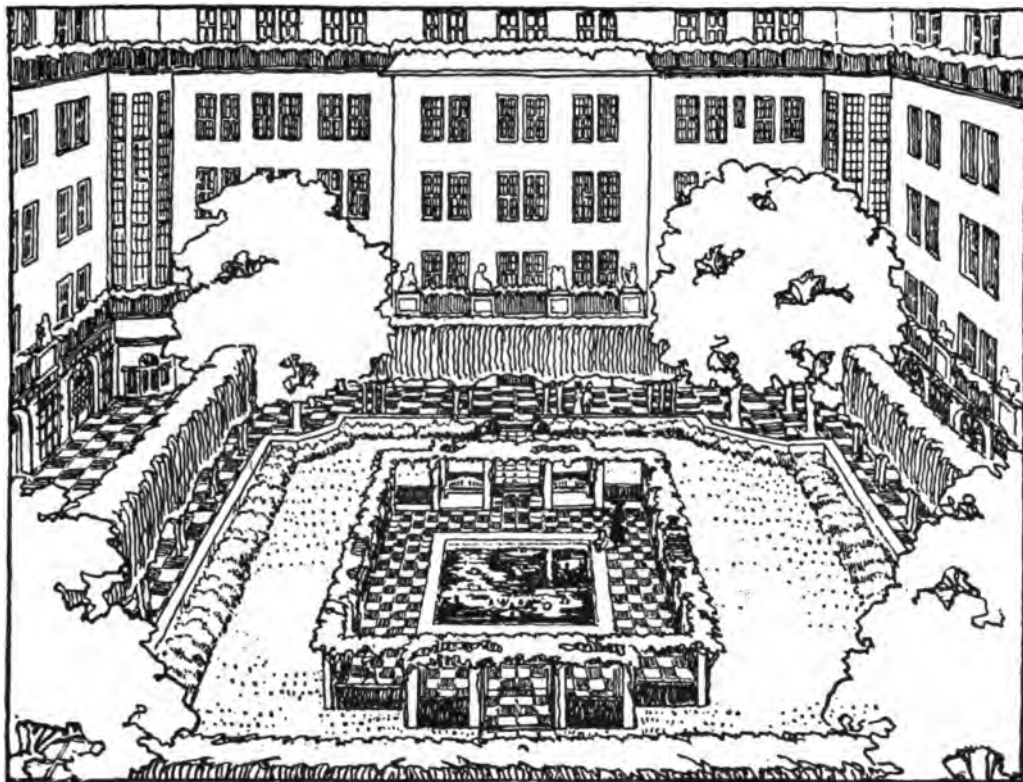
**GOOD RESIDENTIAL ARCHITECTURE INTERFERED WITH BY LACK OF HARMONY, TOO NARROW LOTS, THE INVASION OF THE APARTMENT HOUSE AND LACK OF SHADE TREES**

congested cities, the expansion of which was interfered with by fortifications. Protection against apartment houses would distribute and stabilise values. From an artistic point of view, it would be deplorable if the lake front should be built up



**BACK OF A MILWAUKEE APARTMENT HOUSE**

This is a highgrade apartment house. This is typical of the way even expensive and otherwise luxuriously developed apartment houses set a very low standard by building close to the lot line. Hundreds of windows will be blanketed if the neighboring property is built up in the same way. Developments like this have been aptly called "SLUMS OF THE WEALTHY." Compare interior court, p. 28.

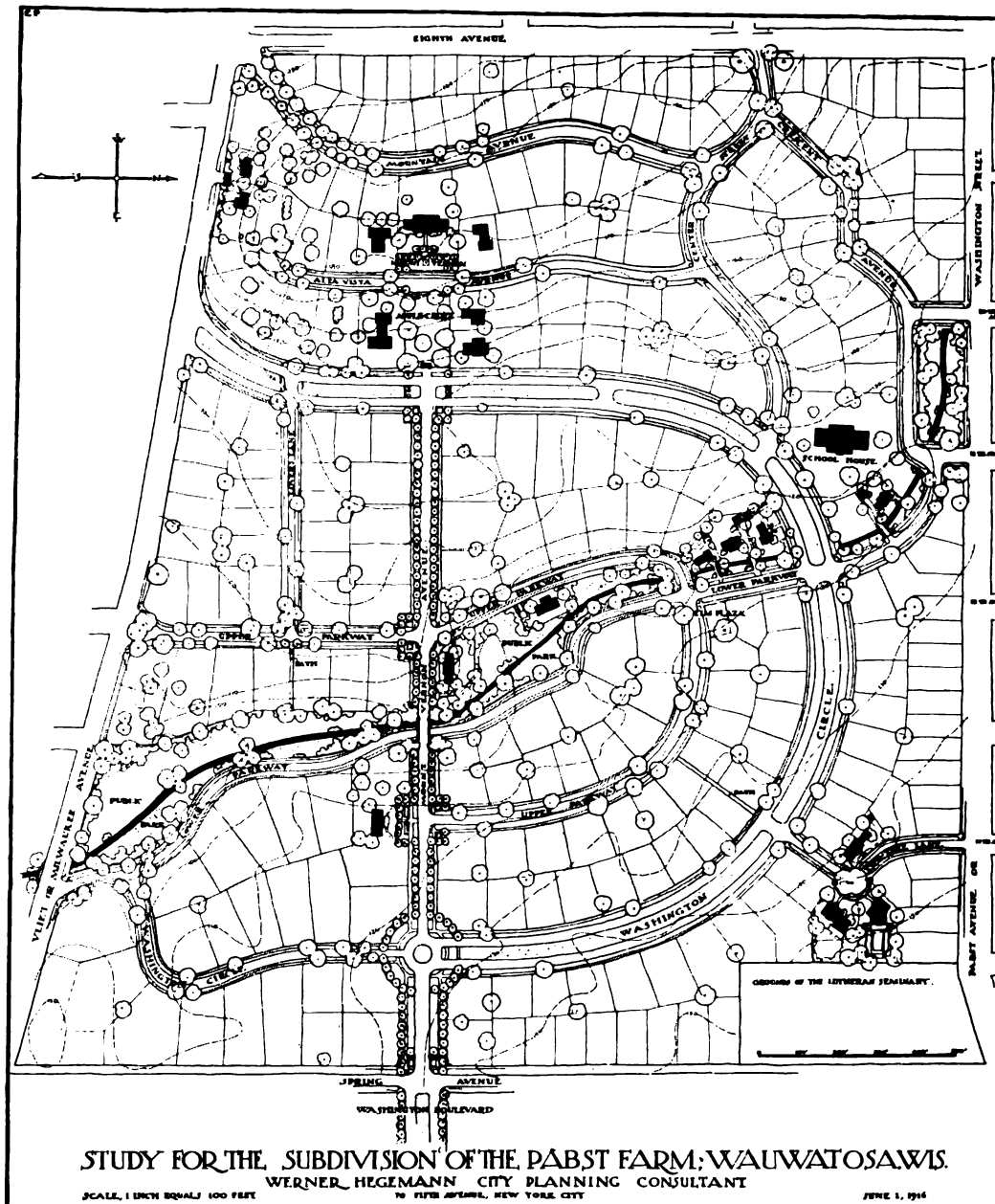


**INTERIOR COURT OF AN APARTMENT HOUSE IN BERLIN, GERMANY**  
 This garden-like development permanently ensures air, light and pleasant views even to those windows of the apartment house which do not face the street. Compare the crowded development on the preceding page. (From a sketch by W. Luserke.)

with a wall of high apartment buildings. One needs not to speak about the destructive effects wrought on family and child life in the upper stories of these apartments, where the concentration of living space and the disappearing garden and the disappearing bed is often identical with the disappearing of the child.

Wherever the difficulty of securing good help for household work enforces closer living, the apartment should be developed not on a vertical but on a horizontal plane. Very charming groups of individual homes have in other cities been closely grouped in rows, or what is called terraces, around a central garden, and have been provided with central heating and general management—thereby providing all the advantages of an apartment house on the ground floor, combined with the privacy and charm of individual homes.

Wherever people are well enough off to afford individual homes surrounded with gardens, the unfortunate hodge-podge mixture of styles, so common in the fancy-stricken lanes of wealthy suburbs, will, it is hoped, gradually give way to the desire for harmony, without which architectural qualities cannot be achieved. At present there is so little co-operation between the builders of wealthier homes, that it is almost an unfair demand made on an architect, with artistic feeling, to build an individual home, because he may be almost sure that his efforts will be



### SUGGESTION FOR THE SUBDIVISION OF A HILLY SUBURBAN AREA OF MILWAUKEE FOR MEDIUM AND HIGH CLASS RESIDENCES

There are differences in level of over 100 feet. Instead of monotonous checkerboard streets with their high expense for grading, the plan aims: to avoid cutting and filling, to bring the streets at easy grades up or around the hills, to make the hills points of vantage crowned by highly desirable building sites, to organize the whole area as a secluded residential park and by a visual relation to bring it in close connection with Washington Park. The existing trees are made part of the plan. The highest hills of the subdivision close the vista of Washington Boulevard, which connects the subdivision in a straight line with Washington Park. The streets passing in front of the hills will appear as terraces.

(Reproduced by courtesy of Richter, Dick and Reutemann, Milwaukee.)





#### **PUBLIC SQUARE IN GARDEN-SUBURB BERLIN-FROHNAU, GERMANY**

Around this garden square are grouped: railroad station, water tower, restaurant, apartment-hotel and department store. The various necessary activities are thus pleasantly expressed and the rest of the residential suburb is protected against undesirable encroachments. In Milwaukee good residential districts have been ruined by the inroad of stores, apartment houses and factories. Photo by courtesy of R. Philipp, Architect, Milwaukee.

killed by some neighboring house being built out of harmony and in disregard of surrounding efforts. In order to secure architectural qualities in a residential neighborhood, some understanding about common aims, style, material, color and height must be developed, and this understanding must go hand in hand with the plan for the streets, planting, set-back of houses and relation to public buildings, and the abandonment of the dreary monotony of the checkerboard. Well proportioned vistas, open spaces, generous and well considered planting, curved roads, when made advisable by the topography of the land, all help to enhance the beauty of the residential districts.

#### **MILWAUKEE RIVER.**

It was harmony in architectural style and material that gave the ever present charm to the cities of previous centuries. Only since the second part of the 19th Century, has the wild carnival of misapplied styles begun to deface the cities of Europe and America. A lack of quality and architectural harmony is especially objectionable when it appears along a wide avenue and unhidden by trees or when



#### VIEW OF MILWAUKEE RIVER AND GRAND AVENUE BRIDGE

showing some fine and many expensive buildings representing investments much greater than made along the Canal Grande of Venice, but without harmony and discretion. Note the enormous structure of the First National Bank Building, which probably forever will expose its bare party walls to the crowds passing over Grand Avenue Bridge. Compare pictures on following two pages.

on a water front. Such is the view, always conspicuous, presented by the buildings facing the Milwaukee River on either side. The Milwaukee River at present is a part of the Harbor of Milwaukee. The necessity, however, of opening as many as ten bridges for this river traffic, makes the use of Milwaukee River, as a part of the harbor, most uneconomic. It has been calculated by Professor Davis that the opening and closing of the Milwaukee River bridges causes an average expense of thirteen cents for every ton of freight going up the Milwaukee River. This is a tax levied upon the community at large, which should speedily lead to the abandonment of Milwaukee River as a part of the harbor.

The question arises. What shall become of the Milwaukee River after its disuse as part of the Port? Already in the erection of a number of new buildings, the new idea of considering the river front as important as the street front has been accepted, and architecturally well developed facades now appear on either shore, as, for instance, the Marshall-Isley Bank and the First National Bank, with its interesting terrace. This idea should be encouraged, and gradually the river will be transformed into a beautiful canal almost Venetian in character. The bridges could become permanent and still leave sufficient space for pleasure boats



#### **CANAL GRANDE, VENICE, ITALY**

one of the finest examples of a water course lined harmoniously with beautiful buildings.

or even for a kind of rapid-transit service on the river somewhat like the "bateaux-mouches" on the River Seine in Paris. Another possible treatment of the river would be to have a street on one side, leaving the structures on the other side rise directly out of the water as they do at present. Architect A. C. Clas has made another proposal, namely, the building of streets on both sides of the river, and others again propose to have the entire river covered, emptying its water into the lake through a tunnel further north and using the dry river-bed in connection with a new solution of the railroad situation. This latter scheme would be advantageous if a combination of the passenger terminal facilities in this city could be secured and a modern system of through routing be introduced. Mr. Clas' scheme contemplates locations for the interurban service under the pavements of the two streets on either side. What the right solution of the problem is can be determined only after a very careful investigation of the needs of street traffic, electric street car traffic and the railroad situation, studying these closely related subjects comprehensively in their entirety and their interrelation. Whatever will be done, the supposition that the facades facing the river cannot be seen by the public and that any kind of treatment is good enough for them must be abandoned. The river is not a back-yard, but offers rather exceptional building sites which are more in view of the public than most others. This is especially true of the two corner buildings, the Pabst Building and the Gimbel Store, which close up the vistas of Grand Avenue looking East and of Wisconsin Street looking West. The Pabst



**KOENIGS-ALLEE, MAIN BUSINESS STREET OF DÜSSELDORF,  
GERMANY**

The business houses line up back of the trees at the right. One of the finest examples which show that a main business street of a large city can be beautifully parked. These plantings of the banks of an old moat also furnish a suggestion for the ultimate treatment of Milwaukee River in the downtown section after its transformation as discussed on pages 31 and 32.

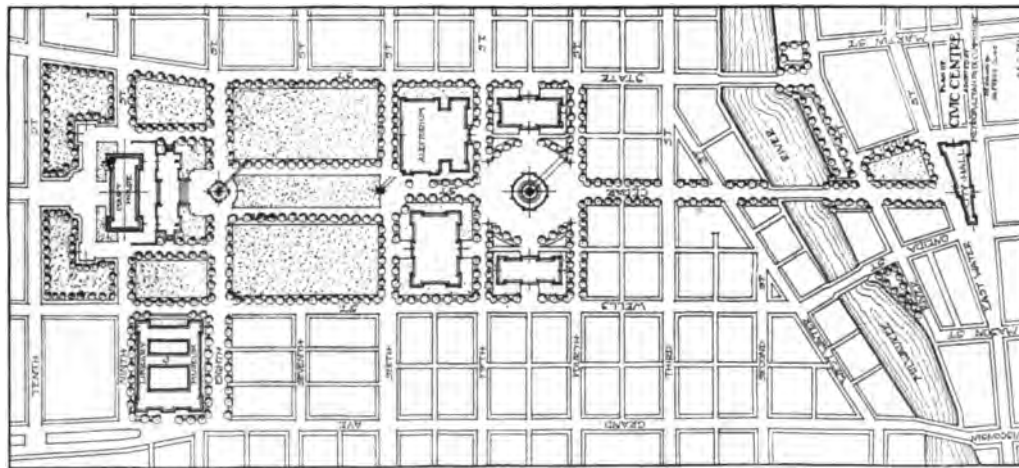
Building is particularly successful in this regard, and it is hoped that especial attention will be paid to the future building which will terminate the Wisconsin Street vista.

### **THE CIVIC CENTER.**

A dignified treatment of the architectural facades along the river front is especially important in connection with the civic center idea. The principal function of a Civic Center is to so group the public buildings of a community that the money expended on them will not be frittered away on ineffectual efforts, but so that every cent invested will contribute towards producing a large unit, really expressive of the dignity and importance of the city.

The civic center, together with the parks, is that feature of city planning which so far has been most strongly emphasized in the public discussions of Milwaukee. The Metropolitan Park Commission, after proposing a Civic Center plan in 1909, went so far as to invite two experts to study and report on the best location for the civic center. Mr. Frederick Law Olmsted and Dr. John Nolen, leading American City planners, spent a week in Milwaukee, examining the plans of the civic center, prepared under the direction of the Metropolitan Park Commission. This special investigation of the problem led to practically an indorsement of the Metropolitan Park Commission's plan and the making of some valuable suggestions for their improvement. The two experts emphatically emphasized the general advantages of a location of the Civic Center in the axis of Cedar Street and Ninth Street, comprising the territory between Tenth and Fourth Street, Wells and State Street. Regarding this site, the two consultants declare:

"So far as concerns the practical question of comparison with any possible alternative site, such disadvantages as are peculiar to the site proposed are



### PLAN FOR THE CIVIC CENTER OF MILWAUKEE ON THE AXIS OF CEDAR STREET

as recommended by the Metropolitan Park Commission in 1909, containing the modifications suggested by Messrs. F. L. Olmsted and John Nolen.

emphatically outweighed, in our opinion, by its manifest advantages, notably its proximity to the business center combined with the economy of purchase, a visual relationship to the City Hall, and an arrangement of grades favorable to a fine, artistic composition.

As to the general proposition, therefore, of grouping the principal future public buildings about an open space or spaces arranged on the axis of Cedar Street, between the crest of the hill at Ninth Street and the City Hall, we can only congratulate the community upon the existence of such an opportunity and urgently advise that it be not lost by delay."

In the description of this site, the two experts further say:

"In many respects, the site may be said to resemble that of the United States Capitol. There, as here, in approaching from the city by street cars or other vehicles, people ascend the hill to the right or the left of the main axis and enter the building from the upper level, while the direct access by people on foot is by means of the steps and terraces on the opposite side, terraces which add enormously to the architectural effect of the building as seen from the lower ground and which in turn command a most important outlook over the space below them. The elevation of the building upon such a system of terraces will not only contribute greatly to its effect as seen from the rest of the Civic Center, but is very important in respect to its appearance as seen from the west."

In view of such an emphatic endorsement of one definite site, given by two of the leading men in the profession in this country, and based upon a special study, the author of this report, not having been able to give to this matter as much time as did the two gentlemen in question, does not feel justified in making further comment. It may be added that since the above opinion was delivered, conditions have changed very little. Two criticisms of this approved site are sometimes heard. The one comes from advocates of the east side interests, who wish to keep the court house where it now stands, but who do not consider the fact that, first, the selection of a civic center site is not necessarily tied up with the location of the



**LITTLE MARKET SQUARE IN ESSEN—MARGARETENHOEHE,  
GERMANY**

Around this square are grouped harmoniously buildings of several different types. The co-operative department store is at the left, with the stalls of the free public market in front. At the right and left are small apartment houses, while the hotel (not shown in the picture) is opposite the department store.

court house, and second, that the very desirable introduction of the court house as one of the main features of the civic center can hardly be thought of if the court house is to be kept in its old location. Land values in that neighborhood are too high to permit the acquirement of sufficient land to group other public buildings around it. The old antagonism between east and west reminds of the jealousy of Kilbourne vs. Juneau, and is unworthy in view of the great object to be achieved. The other criticism of the Ninth and Cedar Street site is that the civic center should be located on the lake front. The answer to this criticism is that the site selected by the Metropolitan Park Commission and endorsed by Messrs. Olmsted and Nolen, has the great advantage of joining together the present Public Library (to be enlarged to Wells Street), the Auditorium, and by visual relation, also the City Hall, and furthermore, the main axis between the City Hall and the Court House, crossing the river, would cause the Milwaukee River to be an essential feature in the civic center scheme. This connection with the river will prove a special attraction if the Milwaukee River is transformed and beautified as referred to above. The fact that there is no architectural connection between the suggested civic center site and the lake remains, but it is probably impossible to enjoy all possible advantages at the same time. It must be remembered that a location on

the lake could hardly be called a central one, and a central location, as the name itself suggests, is desirable for a civic center.

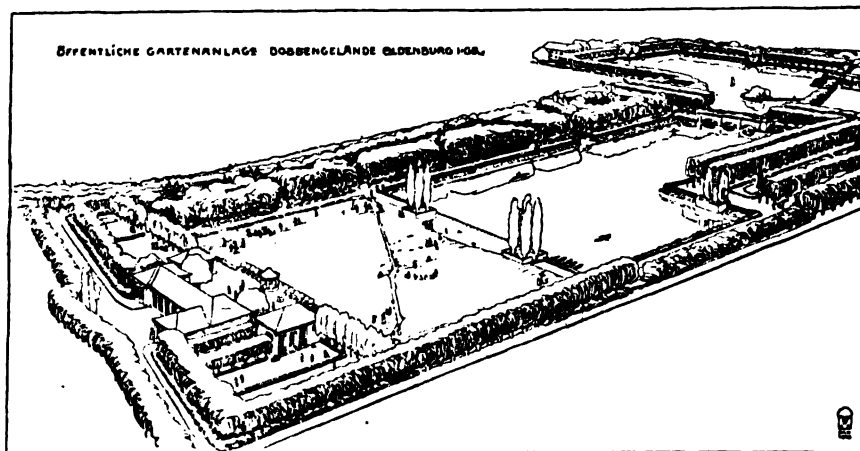
Besides, a location on the lake, in addition to the practical impossibility of securing it, could be reached from the south side only with difficulty. If the present Court House site is abandoned, the square will serve as a much needed park for the dwellers in the congested sections. It will also serve as a needed foreground for the beautiful cathedral tower.

### CONCLUSION: DEFINITION OF THE TERM "CITY PLANNING".

In the foregoing some of the most important aspects of city planning for Milwaukee have been dealt with. The comprehensive treatment of these various problems is necessary. City planning means co-ordination of the activities that make for the growth of the city, especially the activities of railroad and harbor engineers, landscape architects, street building and civil engineers, builders of factories, of offices, of public buildings and dwelling houses. Without such pre-planning co-ordination, clashes between these different activities, unsatisfactory results, and most expensive re-arrangements become unavoidable. City Planning, therefore, does not mean additional expenditure of money, but it means an insurance against waste and inefficient expenditure of the enormous sums that go—in the regular course of events—into the development of a progressive city.

No civic progress can be expected without planning for it.

Werner Hegemann,  
City Planning Consultant,  
New York, 70 Fifth Avenue.



PUBLIC PARK IN THE NEW GERMAN STYLE IN OLDENBURG. DESIGNED BY L. MIGGE.



## APPENDIX

## EXTRACTS

SELECTED BY MR. W. H. SCHUCHARDT, PRESIDENT OF  
THE WISCONSIN CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS, FROM DR. W. HEGEMANN'S  
REPORT ON A CITY PLAN FOR THE MUNICIPALITIES OF OAKLAND AND BERKELEY, CALIFORNIA, 1915.

### THE ASSET OF A HARBOR.

The development of the wide area of a modern great city necessarily rests on the economic basis of commerce and industry. The most efficient instrument of commerce and industry is a large harbor. The harbor binds together railroad and water transportation and produces at the place of exchange between land and water the ideal industrial site with the possibility of cheaply transforming, combining and distributing the transient goods. All large cities necessarily must have large harbors. London, probably the only city in the world that ever attained a population of one million people before the introduction of railroads, achieved this result only on the basis of the famous London harbor. The coat of arms of Paris since the first century of the Christian era has been a sailing vessel, and to-day Paris, though it is located far from the ocean, on a comparatively small river only, is the largest harbor of France, with a tonnage of fifteen millions, twice as much as Marseilles, the great French ocean harbor. Forty-three per cent. of all the imports of Berlin come by water.

### THE POSSIBILITIES OF A MODERN INDUSTRIAL HARBOR.

A modern industrial harbor does away with the expensive handling of the products between factory and steamer by truck, and in many cases may eliminate even the freight car as an intermediary. As soon as direct water approach is given to every factory that can make use of it, the ship and dock winches, swinging and traveling cranes, bucket elevators, belt conveyors, derricks, lifting towers, grab buckets and hoisters can put their superhuman powers to work with a marvelous intelligence and reap the hundredfold harvest of true efficiency.

To lift the raw materials directly from the hold of the vessel into the claws of the transforming machinery and to drop the finished goods directly after leaving the last process of transformation into another vessel or into the freight car: this means to do away with unnecessary handling and waste of time, one of the important items in the cost of old-time manufacture. This ideal efficiency is the logical goal aimed at by modern development. Wherever the centralization of the modern capitalistic forces has permitted the application of the best methods and thought, the waste in local handling is eliminated. Even the simplest minded could not but smile if he tried to imagine, for instance, the Richmond Standard Oil Refinery, with its 60,000 barrels daily production, ferrying its oil across the Bay to peninsular San Francisco, or operating under as inefficient methods as the Oakland or Berkeley merchant who loads his finished goods on a truck, teams them down to Oakland or Berkeley wharf, unloads them and reloads them on a Bay steamer,

crosses the Bay and unloads and reloads once or twice before the ocean steamer is reached. Avoiding every bit of unnecessary handling is one of the most important factors that determined the choice of the organization of the sites of Standard Oil or United States Steel plants; one has to think only of the new Standard Oil Works on the Bay or of Gary, the huge and suddenly developed steel town on Lake Michigan.

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As serious as the losses in money, time and competing power by the shippers of car-load lots are the sufferings of the shipper of less than car-load lots. The shipping of less than car-load lots is a very important item in the economic make up of an industrial community. The character of the trade of large producers often is such that their shipments have to be split up into small lots to different addresses; and besides the big producer in every growing community there are many small producers that are building up new industries. These growing new industries, just starting from small beginnings, are of great importance for the future of any industrial community, if they can prosper and develop into large industries under favorable conditions. They are strangled, however, if the conditions of local handling and local expense are adverse.

#### THE EQUITABLE BASIS UPON WHICH TO SOLVE RAILROAD PROBLEMS.

Another of the leading authorities of this country, Bion J. Arnold, in his new Chicago Railroad Terminal Report, says: "The easiest thing for the city to do is to require nothing and to let the railroads have what they ask; the most difficult thing for the city to do is to require the railroad companies to carry out the plan best suited to the entire city, at their own expense; the just thing to do is to join with the railroads in carrying out, on some equitable basis, the plan which will gradually put into effect such recommendations as are considered sound."

Mr. Arnold makes very clear in many passages of his report that there is no disposition on his part to cause the railways loss or inconvenience, but that he sincerely believes such co-operation between the railroads and the city will ultimately benefit both parties concerned. It is such a broad and liberal spirit that I would invoke to solve the present and all future problems of railroad transportation in the East Shore cities.

#### LAWS OF GROWTH IN RAILROAD TRAFFIC.

To some it may seem that there is no pressing necessity for careful guarding against such expensive mistakes as those that old cities, or even comparatively new cities like Chicago, are endeavoring to remedy. But it must be pointed out that it is a well established law that freight and passenger traffic will increase with much greater rapidity than population. The law briefly stated is; train movement increases as the square, and the number of passengers as the cube, of the population.

#### RESPONSIBILITIES OF THE REAL ESTATE SUBDIVIDER.

The duties and responsibilities which fall upon the modern subdivider can hardly be overestimated. They are especially comprehensive in the American city, which, unlike the German city, does not closely supervise the subdividing activities (city-planning), but leaves all responsibility with the private individual. To lay out a subdivision of any grade in a satisfactory way from the many points of view that have to be considered, including all the questions of transportation, proper type of streets, width, planting, paving, sewers, wires, etc., the proper size of lots, artistic

and pleasing lines for the streets and their grades, the proper grouping of the lots in order to make architectural effects possible, the question of proper restrictions and their enforcement, the supervision of the architecture, not to speak of the complicated, economic and legal side of the whole process, and the ingenuity and push needed in order to successfully market the property—this all demands a very high degree of skill, experience, imagination and enterprise. First class service and the best expert advice in this field will always call for high remuneration. Unfortunately, the profit that can be made on more expensive developments compared with the cheap lots considered in the above example is disproportionately much larger. This is very unfortunate for the small lot, because it means that the best professional intelligence available necessarily must be inclined to turn to more expensive development and neglect the socially so important cheap subdivisions. Every effort therefore must be made to cut down avoidable expenses in the development of the home site for the workingman.

#### THE EDUCATION OF THE BUYER.

Since the commissions of the salesman is an item on which considerable savings can be made, the role of the salesman as an educator of the hesitating buyer to home ideals, must be taken over by public opinion and semi-public agencies. Like the cities of Europe, the American cities, or semi-public bodies for them, must contribute to the establishment of healthy home standards. One of the ways in which this can be done is by the establishment of a public or semi-public agency for reliable information about homes available for rent or purchase. The character of this agency must be so high that its passing upon and offering of a certain unit type of homes will be sufficient to destroy suspicion in the mind of the home seeker.

#### LOANS ON WORKINGMEN'S HOMES.

An important item where large savings in securing the small home can be made, is the interest on the money. The policy of the Savings Banks and of the institutions for life and old age insurance have led already, in many examples in Europe to lending money for home purposes at 4% or less. The American Postal Savings Banks, which collect the savings of the small investor, ought to do similar work. The city might also lend its guarantee to bonds issued by co-operative building societies, thus securing to them a low rate of interest. Several Australian states started most successfully on these lines; I had occasion to inspect the gratifying results of the South Australian law modeled upon the New Zealand act.

#### THE HOUSING INDUSTRY RETAINS SMALL METHODS OF 500 YEARS AGO, MODERN WHOLESALE METHODS ARE NEEDED.

There are other items not connected with the marketing of the land alone, in which savings in the cost of workingmen's housing can be made. Such an item is the cost of the building. If building is undertaken on a wholesale basis by the builders of small houses, making use of best professional advice and applying wholesale methods of producing all the different parts of the houses in a satisfactory way, great savings can be made thereby. Powerful movements in the applied arts in Germany have made it a very common thing for the large wholesale producers to employ artists of national reputation for designing the original pattern for the thousand different objects which are turned out by the wholesale methods of modern machinery. If this idea is applied to the output of some of the leading Western lumber dealers and factories, and to the entire process of building cheap houses, then it will be possible to produce highly satisfactory units which can be assembled into houses suiting individual taste, and the clever grouping of which on

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well platted lots facing decently planted streets and squares, will surpass everything that can be seen in the wealthier suburbs. The most inexpensive workingmen's streets of famous garden suburbs like Hellerau, near Dresden, or Hampstead, near London, often set the highest architectural standard, which the wealthier parts of the same suburbs have to live up to. The skillful combination of large building enterprises of the kind described with a progressive policy of real estate development is necessary to get satisfactory results from every point of view, especially from the selling point of view.

#### THE GAY POSSIBILITIES OF STREET ADVERTISING.

A similar, but even more serious problem, presents itself in the billboard nuisance—a specific American disease which has caused so much discussion that it does not need to be entered into here. The cities of Europe by taxing, municipalizing and standardizing all street advertising, draw a handsome revenue from it. The advertising columns placed by these cities on the street corners are indispensable sources of information to everybody, and under the powerful movement in the applied arts, especially in Germany, have given rise to a real art of designing and printing artistic posters which, with the help of the leading painters of the nation, has made the advertising column of the street corner one of the gayest and most charming features of city life. The American billboard in its exaggerated size is a calamity, financed expensively by the consumer.

The planning of parkways or residential streets with trees, shrubs, flowers and grass is perhaps the least expensive and most effective method of beautification within reach of the East Bay cities.

#### GOOD FELLOWSHIP IN ARCHITECTURAL STYLES.

The happy results achieved in East Bay home architecture nearly all suffer from their being restricted to individual efforts, while the idea of correlating individual houses in order to secure heightened effects by intelligent teamwork is still comparatively new and little tried. Progress in this direction is absolutely necessary. The finest layout of a subdivision, giving splendid views before houses went up, becomes a mess as soon as private owners indulge in ill-advised orgies of individualism, killing each other's architecture by heterogeneous materials and mistaken choices of forms and colors. As soon as the victorious pride of the self-made money maker, who feels like urging his independence upon his neighbor, gradually is subdued by manners and good fellowship, civilized people reach an understanding about how they will meet not only on social, but also on architectural and landscape architectural grounds. Then the splendid effects of friendly co-operation in private planting and building can be reached, effects which form the necessary introduction and approach to the still higher efforts in the grouping of public buildings.

## PRESS REVIEWS

of the two first volumes of

**"DER STAEDTEBAU NACH DEN ERGEBNISSEN DER ALLGEMEINEN  
STAEDTEBAU AUSSTELLUNG." ("CITY PLANNING ACCORD-  
ING TO THE RESULTS OF THE INTERNATIONAL CITY  
PLANNING EXHIBITION.") BY DR. WERNER  
HEGEMANN. BERLIN, ERNST WASMUTH,  
A. G. Vol. I, 1911. Vol. II, 1913.**

This is the second volume of a monumental work on city-planning, which deals not merely with principles and theories, but discusses the existing conditions and problems of the largest cities of Europe and America, and the discussions and conclusions upon the materials which made up the Berlin and Dusseldorf City-Planning Exhibits.

The whole of Dr. Hegemann's work, which is to be completed in three volumes, is intended both as an exposition of the history of city planning, and as an interpretation of the most recent developments in community building. The city-planning exhibits, which were organized under the supervision of the author, and which represented a vast amount of important material gathered from all parts of the world, are given permanency through this work. The main value of the book, however, is to be found in the impartial and critical interpretation of the value of past and existing plans, and their social, economic and esthetic significance. City-planning exhibits are generally prepared for the purpose of educating public opinion and rendering possible the comparison of essentials. The subjects dealt with, however, are so complicated, so difficult for the ordinary public to understand, and so subject to differences of opinion, that no exhibit renders full service to the community, or to the world at large, unless its various departments and individual charts and maps are weighed in the balance of expert knowledge, and with a proper understanding of the local conditions which have called forth their creation. This Dr. Hegemann accomplishes in his work.

Transit and means of intercommunication, community expansions, open spaces, and the general plans of the larger cities are discussed in this work clearly, concisely and with a wealth of statistical and historical information, combined with a knowledge of the factors that have determined certain developments. The maps and charts, as well as the half-tone reproductions of photographs, make the volume almost indispensable as a reference book for the city planner.

Whether we agree or not with the various points of view that the author presents, it must be conceded that he has mastered his subject, and that he has placed before us documentary evidence that has never been collected and organized before, and which serves to clear up many important points regarding the history and the application of the science of community building and the art of city planning.

From the Journal of the American Institute of Architects.

Our nation in the near future will have to discuss Dr. Werner Hegemann's comprehensive work about city planning. This book will revolutionize the ideas and sentiments of all earnest Germans, for it is more than the product of an astonishing learnedness and practical knowledge; it is the expression of a passionate soul. This book is a deed and will create deeds.

Professor Alfred Lichtwark, Director of the State Art Institute, Hamburg, author of "Royal Cities of Germany," "City planning," etc., in the "Hamburger Fremdenblatt."

Aside from the transactions of the scientific congresses the most important publication of the year 1911 in the field of housing literature is Dr. Werner Hegemann's great work on "City Planning," the outcome of the epoch-making Berlin City-planning Exhibition. The first volume of this monumental work is a very valuable and significant contribution to the history of the housing problem, especially in Germany and Berlin.

Dr. C. J. Fuchs, Professor of Tuebingen University, a leading authority in Germany on housing problems, in "Annalen fuer sociale Politik und Gesetzgebung."

Dr. Werner Hegemann is not a prosy relator merely lining up facts, but he is a personality of ethical power following the march of events with passionate interest. The subject of the book in its various stages is interesting in itself and through the author's literary ability the reader is kept in continuous tension.

Dr. Werner Weisbach, Professor of History of Fine Arts at the University of Berlin, in "Prussian Yearbooks."

Here the author has written a first class work on city planning in Berlin, and on city planning, housing and land problems in general. By its abundance of evidence, clearness of judgment and by its captivating eloquence the book almost forces the reader into sympathy and action.

From Schmoller's Yearbook, leading German periodical for Political Economy.

A standard work on the history of Berlin city building.

Berliner Tageblatt.

If the second and third volumes prove to be as perfect as the first, which I do not doubt, we shall have a standard work such as of which there are few in existence.

Dr. J. Stuebben, Prussian Privy Councilor, author of "Der Staedtebau."

"Of foreign manuals Dr. Werner Hegemann's 'Der Staedtebau' (two volumes published), Berlin, 1911 and 1913, may be especially recommended."

Professor Patrick Geddes in "Cities in Evolution," London, 1915.

The author has rendered by his work a great service to our country. The book for a long time will be a wellspring of information and suggestion to all connected with city planning. To administrators, engineers, architects and landscape architects this work should be most warmly recommended.

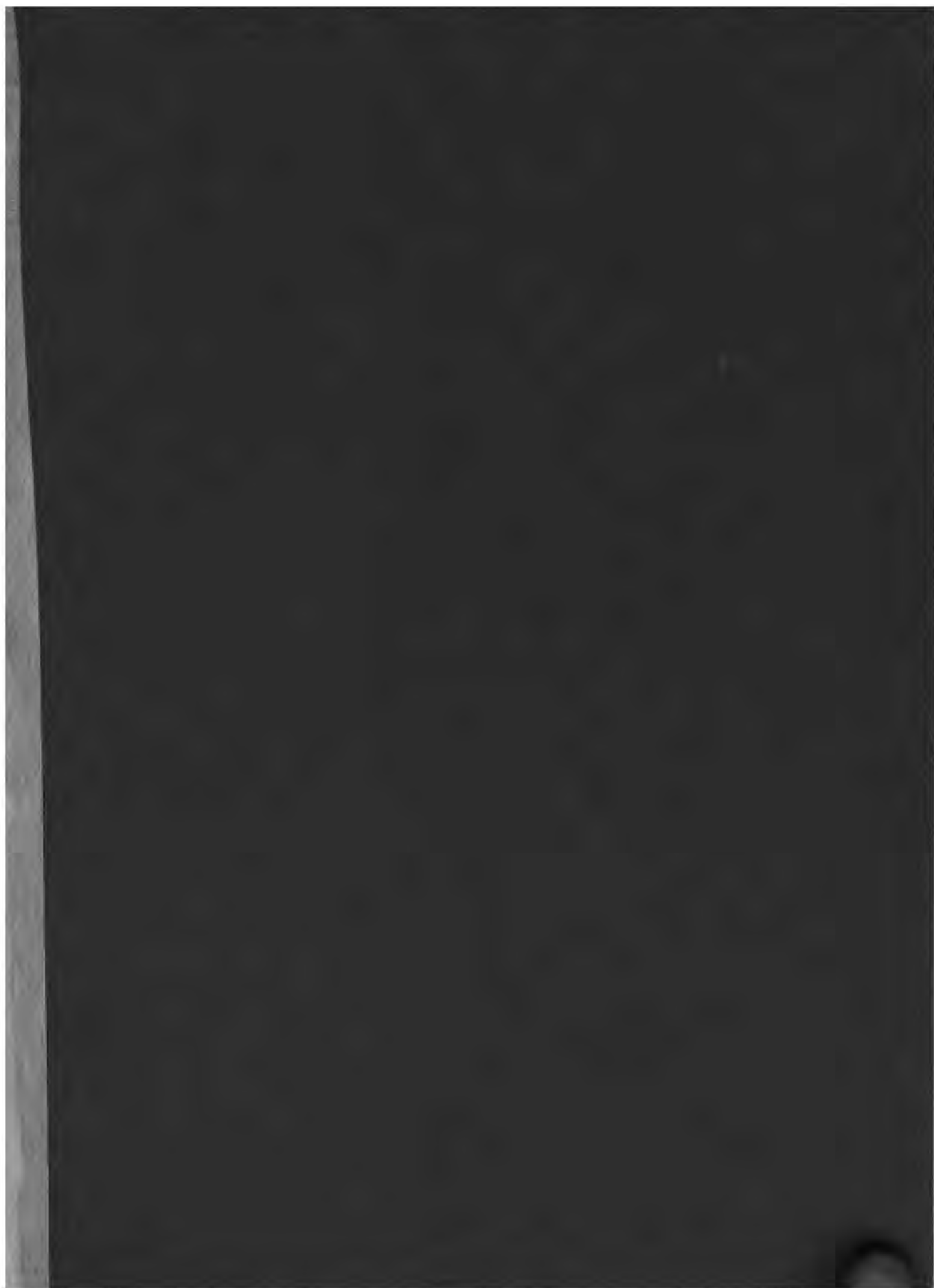
Professor Theodor Goecke, Prussian Privy Councilor, Founder and Editor of "Der Staedtebau," the leading city planning monthly.

The book is a real treasure for the student of city planning conditions in European and American cities and contains a wealth of information that is astounding. Dr. Hegemann as General Secretary of the great City Planning Exhibition in Berlin and Duesseldorf has, as hardly anyone else, secured a grasp of the city planning material of the entire world. The appearance of the book represents a milestone in the development of city planning ideas.

Professor Hermann Muthesius, Privy Councilor in the Prussian Ministry of Commerce and one of the leading architects and architectural critics of modern Germany in "Ueber Land und Meer."









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